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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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530	7590	05/02/2006	EXAMINER	
LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			COLIN, CARL G	
			ART UNIT	PAPER NUMBER
			2136	

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/764,602	Applicant(s) HIRAI, JUN	
	Examiner Carl Colin	Art Unit 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-6,8,10,11,14-16,18,20 and 53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6,8,10,11,14-16,18,20 and 53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 21 October 2004 is: a) ☒ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. In response to communications filed on 2/14/2006, applicant amends claims 4 and 14.

The following claims 4-6, 8, 10, 11, 14-16, 18, 20, and 53 are presented for examination.

1.1 In response to communications filed on 2/14/2006, the 112 rejection of claims 4 and 14 have been withdrawn in view of the amendment.

1.2 Applicant's remarks, pages 7-10, filed on 2/14/2006, with respect to the rejection of claims 4, 11, 14, and 53 have been fully considered, but they are not persuasive. Regarding claims 4 and 14, applicant has amended claims 4 and 14 to more clearly claim the claimed invention. Applicant argues that Stefik does not disclose the claimed limitation because Stefik does not teach or suggest transmitting both unencrypted and encrypted of particular information". However, Levy discloses transmitting both unencrypted identification information and encrypted information (see column 3, lines 24-63). Applicant further argues that Stefik does not disclose the same device performing the decrypting and the comparing. However, Levy discloses the same device decoding and comparing to determine if distribution was with the owner's authorization. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant states that

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Examiner agrees that Levy does not teach or suggests determining whether the one or more pieces of content have been distributed with authorization of the owner of the one or more pieces of content. Examiner would like to clarify that applicant has misinterpreted Examiner's statement; Examiner indicated previously that the claimed limitation could be interpreted in different ways and Levy's disclosure reads on at least one interpretation of the claimed limitation as clarified further by the Examiner below. In response to Applicant's argument that Stefik does not disclose "monitoring distribution of one or more content to determine whether the one or more pieces of content have been distributed with authorization of the owner of the one or more pieces of content, based on time identification information," Stefik discloses monitoring distribution of message and session information with timestamp authentication to determine whether there has been impersonation in the distribution path, and discloses that only one user can decrypt the key which is used to decrypt subsequent messages that meets the recitation of the claimed limitation (see column 29, lines 1-42). See also another embodiment using auxiliary data to determine that impersonation has occurred that also meets the claimed limitation (column 27, lines 15-31). The authentication protocol that applicant relies on of transmitting authentication information in an unencrypted form and the attached authentication information in an encrypted form and comparing the decrypted information in the encrypted form with the authentication information in the unencrypted form to detect the owner of the message is very well known and Applicant is provided with several prior art documents for teaching this limitation. With respect to claims 11 and 53, Applicant generally alleges that the reference does not disclose issuing time identification information indicating a time of issuance. Examiner respectfully disagrees. As indicated previously Levy discloses this limitation (see column 12,

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line 51-65 and column 13, line 15-22). Stefik also discloses clock synchronization, generating timestamp exchange message and transmitting the time of issuance from one device to another for comparison, which is a well known feature (see column 29, lines 1-42). As explained above, Applicant has not overcome the rejection. Therefore, claims 4-6, 8, 10, 11, 14-16, 18, 20, and 53 remain rejected.

Claim Objections

2. Claims 4, 5, 6, 8, 10, and 53 are objected for the following:

A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

A claim which depends from a dependent claim should not be separated by any claim which does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to

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which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3.1 **Claims 4-6, 8, 10, 11, 14-16, 18, 20, and 53** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,505,160 to **Levy et al** in view of US Patent 5,715,403 to **Stefik** (*Applicant's Disclosure*).

3.2 **As per claims 11 and 53, Levy et al.** substantially discloses a distribution method, system and apparatus for distributing one or more pieces of content owned by one or more owners to one or more receivers and for determining whether the one or more pieces of content have been distributed with authorization of the one or more owners, comprising: for issuing to distributor identifier that that meets the recitation of issuing to the distributor authentication information (see column 5, lines 22-28; column 2, line 60 through column 3, line 10; column 4, lines 1-10) **Levy et al.** discloses that the identifier includes time stamp to allow monitoring of the content that meets the recitation of including time identification information indicating time of issuance (column 12, line 51-65 and column 13, line 15-22) and distributor identification assigned to the distributor, for example (column 3, lines 24-50); distributing one or more pieces of content via a predetermined distribution path with the authentication information attached thereto, for example (see column 5, lines 36-67; column 4, lines 14-33); storing a distribution history for each of one or more pieces of the content distributed via the predetermined distribution path in association with specific content identification information (column 6, lines 2-28); and monitoring the distribution of one or more pieces of the content in the predetermined

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distribution path to determine a validity of the content distribution based on identifier distributed with the content including time identification information distributed with the content and to determine a distribution status of the distributed content based on the distribution history, for example (see column 3, lines 40-48 and column 14, lines 26-35). (See also column 2, line 61 through line 23 and column 6, lines 42-60). **Levy et al** discloses different scenarios and embodiments including various parties such as license server, distributor, broadcasting station and other linking servers in which these parties meet the recitation of distributing and/or monitoring apparatus. **Levy et al** suggests a scenario for enabling content owner to use encryption and watermark copy management formats and a server can provide the software for decrypting, decoding the information according to usage rules packaged with the content (column 6, lines 43-60), **Levy et al** further discloses determining a distribution status of the distributed one or more pieces of content based on the distribution history (column 4, line 40 through column 5, line 16). It appears to the Examiner that **Levy et al** does not explicitly teach determining whether the one or more pieces of content have been distributed with authorization of the owner of the one or more pieces of content, which could be interpreted as using the timestamp information to show that data has been authorized by the owner as disclosed by **Levy et al** (see column 13, lines 15-22 and column 15, lines 1-15). **Stefik** in an analogous art teaches a system for controlling use and distribution of digital works and discloses clock synchronization, generating timestamp exchange message and transmitting the time of issuance from one device to another for comparison to detect tampering or replay attack, (see column 29, lines 1-42). **Stefik** further discloses a content distribution system for determining whether the one or more pieces of content have been distributed with authorization of one or more owners (see column

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27, lines 15-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the distribution system of **Levy et al** by controlling use and distribution of digital works that allows the owner to attach usage rights to their work including the step of determining whether the one or more pieces of content contains the authentication information, based on the time identification information distributed with the one or more pieces of content as taught by **Stefik**. One skilled in the art would have been lead to make such a modification because it is desirable to protect usage right of owner's digital work by assigning time specification and access specification to restrict the distribution and usage of owner's digital work, for instance, time specification may restrict the content by specifying only a duration to use the content, start time of distributing or accessing the content, etc. as suggested by **Stefik** (see column 31, lines 5-53 and column 21, lines 35 through column 23, line 12). Another advantage would be to prevent replay attack and ensure that someone is not interfering with the communication and the transaction as suggested by **Stefik** (column 27, lines 15-32).

As per claims 4 and 14, Levy et al substantially teaches the claimed method and apparatus of claims 11 and 53. **Levy et al** discloses that some identifier can be encoded and others not encoded in the content to be distributed including timestamp or time of playback that meets the recitation of distributing the one or more pieces of content together with time identification information in an unencrypted form (see column 3, lines 24-63 and column 13, lines 15-22). **Levy et al** also discloses, said monitoring apparatus further being operable to decrypt the authentication information in the encrypted form using the encryption key and to compare the decrypted authentication information with the authentication information in the

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unencrypted form to determine whether the one or more pieces of content have been distributed with authorization of the one or more owners (see column 3, lines 24-63). **Levy et al** suggests encryption/decryption using a key (see column 6, lines 49-60) and further discloses that the identifier may be used to obtain any associated data of the content including the owner such as distributor information and broadcaster information. The authentication protocol of transmitting authentication information in an unencrypted form and the attached authentication information in an encrypted form and comparing the decrypted information in the encrypted form with the authentication information in the unencrypted form to detect the owner of the message is very well known. Therefore, it would have been obvious to one of ordinary skill in the art to modify **Levy** to implement this authentication protocol as mentioned above. One of ordinary skill in the art would have been motivated to do so because it would allow any device to perform authentication using only the authentication information itself that is transmitted obviating the need to compare with information from a database, thereby using fewer resources. **Stefik** in an analogous art teaches a system for controlling use and distribution of digital works and discloses clock synchronization, generating timestamp exchange message and transmitting the time of issuance from one device to another for comparison to detect tampering or replay attack, (see column 29, lines 1-42). **Stefik** further discloses a content distribution system for determining whether the one or more pieces of content have been distributed with authorization of one or more owners (see column 27, lines 15-31). **Stefik** discloses monitoring distribution of message and session information with timestamp authentication to determine whether there has been impersonation in the distribution path, and discloses that only one user can decrypt the key which is used to decrypt subsequent messages that meets the recitation of the claimed limitation (see

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column 29, lines 1-42). Although **Stefik** uses public/private for additional security, a shared key could have been used as known in the art (see column 27, lines 1-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the distribution system of **Levy et al** to distribute the one or more pieces of content together with the attached authentication information in an unencrypted form and the attached authentication information in an encrypted form and encrypted using an encryption key, said monitoring apparatus further being operable to decrypt the authentication information in the encrypted form using the encryption key and to compare the decrypted authentication information with the authentication information in the unencrypted form to determine whether the one or more pieces of content have been distributed with authorization of the one or more owners. One skilled in the art would have been lead to make such a modification to prevent replay attack and ensure that someone is not interfering with the communication and the transaction as suggested by **Stefik** (column 27, lines 15-32). Claims 4 and 14 are also rejected on the same rationale as the rejection of claim 11 above.

As per claims 5 and 15, Levy et al discloses the limitation of wherein said distributing step embeds the authentication information into one or more pieces of the content using a digital watermarking technique, for example (see column 9, lines 39 and column 8, lines 13-30).

As per claims 6 and 16, Levy et al discloses the limitation of wherein said distributing step embeds the authentication information into a distribution signal of one or more pieces of the

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content using a digital watermarking technique, for example (see column 9, lines 39 and column 8, lines 13-30).

As per claims 8 and 18, Levy et al. discloses the limitation of wherein each content has specific content identification information, said distribution apparatus further comprising: storing a distribution history for each piece of one or more pieces of content distributed via the predetermined distribution path in association with its specific content identification information, for example (see column 10, lines 19-67); and extracting only the distribution history associated with specific content by masking the distribution history with a predetermined filter, for example (see column 10, lines 50-67).

As per claims 10 and 20, Levy et al. discloses the limitation of wherein each content has specific content identification information, said distribution apparatus being operable to store a distribution history for each content distributed via said predetermined distribution path association with its specific content identification information (see column 10, lines 19-67), and said monitoring apparatus causes content identification information by which said distribution history can be addressed to be contained in said authentication information, for example (see column 2, line 61 through line 23).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4.1 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as the art discloses transmitting authentication information in an unencrypted form and the attached authentication information in an encrypted form and comparing the decrypted information in the encrypted form with the authentication information in the unencrypted form to detect the owner of the message.

US Patents: 5,010,571 Katznelson; 5,046,092 Walker et al; 5,509,074 Choudhury et al; 5,749,078 Gargilo et al .

4.2 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 571-272-3862. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Carl Colin

Patent Examiner

April 27, 2006

CHRISTOPHER REVAH
PRIMARY EXAMINER

